

4.5 PSP Cover Sheet (Attach to the front of each proposal)

Proposal Title: Brickyard Creek Tributary Riparian Restoration and Outdoor Classroom Project

Applicant Name: The California Conservation Corps

Mailing Address: 1313 Hartnell Avenue, Suite A, Redding, CA 96002

Telephone: (530) 222-0513

Fax: (530) 222-2432

Email: ehcally@ccc.ca.gov

Amount of funding requested: \$ 104,453 for 3 years

Indicate the Topic for which you are applying (check only one box).

- | | |
|---------------------------------------------------------|---------------------------------------------------|
| <input type="checkbox"/> Fish Passage/Fish Screens | <input type="checkbox"/> Introduced Species |
| <input checked="" type="checkbox"/> Habitat Restoration | <input type="checkbox"/> Fish Management/Hatchery |
| <input type="checkbox"/> Local Watershed Stewardship | <input type="checkbox"/> Environmental Education |
| <input type="checkbox"/> Water Quality | |

Does the proposal address a specified Focused Action? ☐ yes ☒ X no

What county or counties is the project located in? Tehama

Indicate the geographic area of your proposal (check only one box):

- | | | | |
|--------------------------|---------------------------|-------------------------------------|----------------------------------------|
| <input type="checkbox"/> | Sacramento River Mainstem | <input type="checkbox"/> | East Side Trib: _____ |
| <input type="checkbox"/> | Sacramento Trib: _____ | <input type="checkbox"/> | Suisun Marsh and Bay |
| <input type="checkbox"/> | San Joaquin Mainstem | <input type="checkbox"/> | North Bay/South Bay _____ |
| <input type="checkbox"/> | San Joaquin Trib: _____ | <input type="checkbox"/> | Landscape (entire Bay/Delta watershed) |
| <input type="checkbox"/> | Delta: _____ | <input checked="" type="checkbox"/> | Other: Brickyard Tributary |

Indicate the primary species which the proposal addresses (check all that apply)

- | | | | |
|-------------------------------------|---------------------------------------------------------------------|-------------------------------------|---------------------------|
| <input type="checkbox"/> | San Joaquin and East-side Delta Tributaries fall-run chinook salmon | <input type="checkbox"/> | Spring-run chinook salmon |
| <input type="checkbox"/> | Winter-run Chinook salmon | <input type="checkbox"/> | Fall-run chinook salmon |
| <input type="checkbox"/> | Late-fall run chinook salmon | <input type="checkbox"/> | Longfin smelt |
| <input type="checkbox"/> | Delta smelt | <input type="checkbox"/> | Steelhead trout |
| <input type="checkbox"/> | Splittail | <input type="checkbox"/> | Striped Bass |
| <input type="checkbox"/> | Green Sturgeon | <input type="checkbox"/> | All chinook species |
| <input checked="" type="checkbox"/> | Migratory birds | <input checked="" type="checkbox"/> | All anadromous salmonids |
| <input checked="" type="checkbox"/> | Other: Native Fish/Flora/Fauna | | |

Specify the ERP strategic objective and target(s) that the project addresses. Include page numbers from January 1999 version of ERP Volume I and II:

Habitat Restoration (ERP Vol 2, p. 210). Visions for Habitats (ERP Vol 2, p. 414). Land Use priorities (ERP Vol 2, p. 415). Implementation Objectives for Central Valley streamflows (ERP Vol 2, p. 213). The project materially increases the amount and quality of riparian habitat in the ecosystem (ERP Vol 1, p.108).

Indicate the type of applicant (check only one box)

- | | |
|----------------------------------------------------------|-----------------------------------------|
| <input checked="" type="checkbox"/> State agency | <input type="checkbox"/> Federal Agency |
| <input type="checkbox"/> Public/Non-profit joint venture | <input type="checkbox"/> Non-profit |
| <input type="checkbox"/> Local government/district | <input type="checkbox"/> Private Party |
| <input type="checkbox"/> University | <input type="checkbox"/> Other: _____ |

Indicate the type of project (check only one box):

- | | |
|-------------------------------------|----------------------------------------------------|
| <input type="checkbox"/> Planning | <input checked="" type="checkbox"/> Implementation |
| <input type="checkbox"/> Monitoring | <input type="checkbox"/> Education |
| <input type="checkbox"/> Research | |

By signing below, the applicant declares the following:

- 1.) The truthfulness of all representations in their proposal;
- 2.) The individual signing the form is entitled to submit the application on behalf of the applicant (if the applicant is an entity or organization); and
- 3.) The person submitting the application has read and understood the conflict of interest and confidentiality discussion in the PSP (Section 2.4) and waives any and all rights to privacy and confidentiality of the proposal on behalf of the applicant, to the extent as provided in the Section.

Erin Healy, Conservation Administrator

Printed name of applicant



Signature of applicant

Brickyard Creek Tributary Riparian Restoration and Outdoor Classroom Project

The California Conservation Corps, State Agency
Erin Healy, Conservation Administrator
1313 Hartnell Ave, Suite A
Redding, CA 96002
Phone: 530.222-0513
Fax: 530.222-2432
email: ehealy@ccc.ca.gov

TAX ID NUMBER - 68-0298653

Participating Organizations

Red Bluff Union High School, Public School
Red Bluff Union High School OPTIONS Program, Public School

Executive Summary

The Brickyard Creek Tributary Restoration and Outdoor Classroom Project, hereafter referred to as the Project, encompasses approximately 3.5 acres of riparian wildlife corridor in Tehama County, CA, immediately adjacent to Red Bluff Union High School. The project consists of reestablishing an oak and perennial grasslands corridor along the bank of a tributary of Brickyard Creek. Brickyard Creek is a tributary of Reeds Creek, which is a Tributary of the Sacramento River. The Project lies in the Colusa Basin Ecological Unit, within the Elder Creek Ecological Unit, and is entirely within the city limits of the city of Red Bluff. Brickyard Trib has its source approximately three miles west of the Project, and drains a watershed of approximately 2,400 acres situated west and northwest of Red Bluff. Brickyard Trib is a seasonal creek, which is typically dry from June to November, except for the occasional small spring. The Project is less than two miles upstream from the confluence of Reeds Creek and the Sacramento mainstem. The Project conforms in all aspects to California Environmental Report (SEQA) "Initial Study: Red Bluff Union High School Acquisition and Expansion (26-2186-02)" dated October 30, 1996.

Blue Oak and Live Oak seedlings, mixed-species native shrubs, and native perennial grass plugs will be planted along an existing riparian corridor approximately 100 feet wide by 1500 feet long. The planting will be supported by an in-ground irrigation system to ensure an 85% survival rate of the oak trees.

The Project will also serve as an outdoor classroom for Red Bluff Union High School (RBUHS). Students from RBUHS will contribute significant efforts to the project, in implementation, monitoring, and maintenance.

The primary ecological objectives are two: the reduction of run-off into the Brickyard tributary to decrease headcuts immediately downstream, and the improvement and expansion of the existing wildlife corridor. The current corridor lies entirely within the banks of the creek, and the Project will triple the size of the corridor. Biological objectives include increased numbers of local fauna, fish, and flora, as well as the eradication of invasive exotic species. The Project will also serve as a valuable educational site designed to instruct and increase stewardship of the environment. In conjunction with these objectives, flood debris and invasive exotics will be removed from approximately 1/4 mile of stream bank and native grasses re-planted.

The Project forms a discreet part of a larger undertaking which includes the construction of a Class-A bicycle path running adjacent to some 4.5 miles of urban riparian area. The trail is designed to be utilized by both students and the public. Plans call for the restoration of the entire area the trail encompasses, and utilization of it as an outdoor riparian classroom. A hands-on environmental education program will operate contiguously with the implementation, maintenance and data collection aspects of the Project. CCC personnel will implement and coordinate field trips, tours, public outreach, and educational units.

Implementation will begin in December 99, with project completion no later than early spring. Monitoring and Data Collection will be performed primarily by students, and will last a minimum of three years. A CCC employed, educational coordinator will assist instructors in developing curriculum and identifying and organizing projects.

The project has the support of the United States Fish and Wildlife Service, Red Bluff Union High School (which owns the land); Instructors supporting the Project include Matt Pritchard (Agriculture Department) Roland Lint (Science Department) Julie Bower (Bidwell Junior High), Daniel Backstrom and Joseph Kittle, whose OPTIONS Program students will be actively involved in every aspect of the project; Frank Cranley, the Superintendent of Schools; Pam Koeberer, President of the Tehama County Education Foundation; Susan Price, Community Development Program Manager for the Community Housing Improvement Program; Barbara McIver, Tehama County Supervisor; Carolyn Ross, Superintendent of Red Bluff Elementary School District; Charles Hayden, Community Development Director for the City of Red Bluff; and Richard A. Bull, Red Bluff City Manager. Their letters are attached.

The project conforms with CALFED objectives in improving and protecting riparian and waterfowl habitat and protecting spawning grounds of salmonids. The project will cost \$104,453 over three years.

Project Description

The Project is located immediately north of Brickyard Creek, just outside the stream-course of an unnamed stream locally referred to as Brickyard Tributary. Brickyard Trib runs approximately 1/4 mile along the west side of Red Bluff Joint Union High School. Brickyard Trib forms part of an urban wildlife riparian corridor some two miles in length, including Brickyard Creek and Reeds Creek, a Sacramento River Tributary.

The Project consists of an irrigated planting of 700 Blue and Live Oak trees, 400 native shrubs, and twenty thousand plugs of native perennial grasses. The irrigation system will be underground and permanent, of PVC pipe construction. Invasive exotics will be removed in areas to be replanted. The area of the project (formerly used for livestock), is, except for a few specimens, within the the stream channel, completely devoid of oak trees, and dominated by exotic annual grasses. The trees will be planted on 10-foot centers with open areas to accomodate perennial grass "meadows" and shrubs. Except for light, powered equipment (a Ditch Witch) for excavating the trenches for the underground irrigation pipes, all work will be accomplished using low-impact hand tools. All oak seedlings will be planted in 8-inch diameter by 3-feet deep holes, enabling maximum growth of tap roots.

An environmental education unit is integrated into restoration efforts, with students benefitting from a science-based curriculum combined with hands-on experience which will help them develop a sense of stewardship and ownership of the Project. The educational program will be coordinated by specially-trained CCC personnel who will also develop lesson units. Science, agriculture, and biology instructors will be involved. The Educational Coordinator will also be responsible for publicizing the project and recruiting student and parent volunteers.

The tasks involved are:

- 1) exotic species eradication in the irrigated portion of the project;
- 2) the installation of an irrigation system;
- 3) the planting of trees and shrubs;
- 4) the planting of native perennial grasses;
- 5) the removal of flood debris and invasive exotic vegetation from the stream banks;
- 6) the replanting of native perennial grasses on the stream banks;
- 7) the monitoring of the planting;
- 8) maintenance of the project;
- 9) Education Coordination, Public Outreach

The first three tasks are inextricably intertwined: experience has shown a three-year survival rate of as little as one percent or less for unirrigated oak trees in this area. The fourth task, reintroduction of native grasses, is not dependent on an irrigation system, and could stand on its own. Tasks six and seven will speed recovery of the

affected riparian area, but are not as critical as the preceding tasks. The nature of tasks 5 and 6 (monitoring and evaluation) are dependent on the other tasks. The schedule for completion of the different tasks comprising the project is:

- 1) exotic species eradication (December, 1999);
- 2) installation of the irrigation system (January 2000);
- 3) the planting of the trees and shrubs (February 2000);
- 4) planting of native grasses (December 1999);
- 5) flood debris removal and eradication of invasive exotics (Task 6, May 2000);
- 6) planting of the stream-channel grasses December 2000);

The entire project (excepting monitoring) will be complete no later than the middle of December, 2000.

The monitoring of the project will consist of measuring the growth and survival rates of a ten-percent sampling of reintroduced native plants, collected quarterly by students as part of their contribution to their watershed. The information will be shared with anyone who wants it, and, specifically, with the United States Fish and Wildlife Service, local schools, the Sacramento River Discovery Center, and the Nature Conservancy/Dye Creek.

The applicant, Shasta Cascade Operations of the California Conservation Corps (CCC), a State Agency, has been located in this area for approximately twenty years. Currently, the CCC payrolls some 60 members in this area, as well as administering the third-largest AmeriCorps program in California (The AmeriCorps Watershed Project), with a budget of \$3.1 million. Four different crews are within commuting distance of the Project.

Ecological and Biological Benefits

The primary objective of the project is to increase the size, health, and sustainability of the existing riparian wildlife corridor. The corridor will be tripled in width from its current size. The replanting of 700 oak trees, with a predicted 5-year survival rate of 85% or better, the reestablishment of deep-root native perennial grasses and shrubs in the area, will increase the wildlife habitat, increase the water-carrying capacity of the area. The secondary objective addresses problems of down-stream erosion.

Through the combinative effects of increased run-off due to the reduction of oak woodlands and viable grasslands, channelization, and construction activity, erosion of the stream-banks has been severe. The increased run-off and the reduced capacity of the creek, with an inherent rise in the velocity of flood-stage waters, has also resulted in the stream forming new oxbows, threatening school fences and structures, as well as structures on private property. The Project represents the first stage in addressing these issues, and the Project will help stabilize the stream bank of the flood-channel along the corridor. The reduction of silt transport to Brickyard Creek, Reeds Creek, and the Sacramento mainstem will reduce damage to sensitive spawning grounds.

Alternatives to irrigating the oak trees exist, and have been tried in this area.

Under the supervision of the resident biologist intern (Darrel Lewis), approximately 1000 acorns were planted by the Nature Conservancy at Dye Creek Preserve. Three years later, one seedling survived. Other planting techniques have resulted in survival rates as high as ten to twenty percent, but the only way to ensure a survival rate greater than that is by irrigation. The CCC, working with the USFS and the Sacramento River Discovery Center, planted approximately 8,000 oak trees three years ago at Lake Red Bluff, replete with underground irrigation. The long-term survival rate of these trees is expected to reach 80%, and by replacing diseased trees, should approach 90%. The survival rate of re-introduced native shrubs will also be significantly increased through irrigation. The native-grass plugs will not be irrigated, and experience has shown that the timing of the planting (early after the first rains of winter) is the critical element in achieving an acceptable survival rate.

The alternative to an underground irrigation is an above-ground system. However, the Project area is accessible to the public, and is frequently utilized for recreational purposes by students from Red Bluff High School. The vast majority of the visitors are pedestrians, with occasional bicycles. This type of traffic would result in continuous damage to an above-ground system, and continual inspection (probably daily) and maintenance costs could be extremely high. The proposed underground system would require very little maintenance and only routine inspections.

The long-term durability of the project is assured through current long-term plans for the area, which include a riparian corridor. Long-term maintenance and monitoring of the project will be provided by high-school students working through the OPTIONS program and their science and agriculture classes. Students will be trained by US Fish and Wildlife personnel and by CCC and/or AmeriCorps Watershed Project members. Students will, in effect, "adopt" this site as their own, and the sense of stewardship which they develop, along with the support of the school, the city, and the county, will ensure the long-term success of the project. Except for light powered equipment (a Ditch Witch) for excavating the trenches for the underground irrigation pipes, all work will be accomplished using low-impact hand tools.

There are no direct linkages with other CALFED projects, but indirect linkages (salmonid protection) exist with the Tehama-Colusa Canal Authority Fish Passage Improvement Project, which lies some 3.3 miles downstream from the Project.

The Project conforms to the vision for the Ecological Zone in that it "involves maintaining or rehabilitating important fishery, wildlife, and plant communities and ecological processes that contribute to the health of the Delta" (ERP Vol 2, p. 210). The Project also restores degraded habitat, helps improve the sediment balance (ERP Vol 2, p. 210). Riparian habitat will be protected and expanded, concurrent with the Visions for Habitats (ERP Vol 2, p. 414). Land Use priorities are addressed through changing the historical use of the land (livestock) to a riparian habitat (ERP Vol 2, p. 415). Implementation Objectives for Central Valley streamflows are also addressed through the Project, helping to "restore basic hydraulic conditions to reactivate and maintain ecological processes that create and sustain habitat required for healthy fish, wildlife, and plant populations" (ERP Vol 2, p. 213). The project materially increases the amount and quality of riparian habitat in the ecosystem (ERP Vol 1, p. 108).

There are no conflicts with non-ecosystem objective. No levees are involved, and water-quality issues (pollutants) are not addressed by the Project.

There are no substantial technological challenges to implementing this project, as the applicant has extensive experience in this area, and the re-establishment of native riparian areas is a well-grounded scientific measure to ensuring the health of the entire biosystem. The timing of the project is important, since the re-establishment of mixed oak woodland/perennial grasslands is a vital step in stabilizing the entire downstream ecosystem. The Project conforms in all aspects to California Environmental Report (CEQA) "Initial Study: Red Bluff Union High School Acquisition and Expansion (26-2186-02)" dated October 30, 1996. No other permits are in effect or required for implementation of the project.

Monitoring and Data Collection Methodology

The growth and survival rates of a ten-percent sampling of re-introduced oaks and shrubs will be monitored for a period of no less than three years. Individual specimens will be marked and a history kept of the height, diameter, and apparent health of each individual. This data will be collected by students from Red Bluff Union High School and Bidwell Junior High School, being trained and supervised by CCC and Public School personnel. The data will be analyzed by personnel from the US Fish and Wildlife Service and specially-trained CCC personnel. Data will be compiled and stored by the CCC and the Schools.

This data will be compared to similar data from other projects in the area (Dye Creek Preserve, the Sacramento River Discovery Center, and CalTrans ISTEAL local plantings) to evaluate the cost-effectiveness and realized biological and ecological benefits. Data will be collected quarterly.

Project Data

What is the survival rate and rate of growth of reintroduced, irrigated oak trees and native shrubs in a riparian habitat?	Data on Reintroduced Specimens: Survival/Size	Data Evaluation Approach How does the rate of growth and survival rate of re-introduced oak seedlings and shrubs compare with other, similar project in neighboring watersheds?	Comments/Data Priority Comparisons of multiple sets of data will yield vital information on survival and growth rates of introduced native plant specimens which can be utilized for future planning of ecosystem rehabilitation in the immediate area.

Educational Data (Reported Quarterly)

Data will be collected using proven instruments already utilized by similar programs in the county. Evaluation of data determining success of the education program will be the result of comparison with similar data from the AmeriCorps Watershed Project, which has operated a similar program in Tehama County for five years.

What is the expected participation of high school and junior-high school students in a hands-on environmental education?	What is the reception of students, volunteers, parents, and instructors to such a program?	What is the expected growth rate of such a program?	What measures are necessary to make such a program a permanent curriculum?
Total Number of Students/Hours Involved in Restoration Efforts	Data Collection by questionnaire and pre- and post- testing.	Comparison of quarterly data reports.	Program analysis based on collected data, costs, and questionnaires to school administrators
Total Number of Students/Hours Involved in Education Efforts	Data Collection by questionnaire and pre- and post- testing	Comparison of quarterly data reports.	
Number of Teachers Involved/Hours	Data Collection by questionnaire and pre- and post- testing	Comparison of quarterly data reports.	

Local Involvement

The project has the support of the United States Fish and Wildlife Service, Red Bluff Union High School (which owns the land); Instructors supporting the Project include Matt Pritchard (Agriculture Department) Roland Lint (Science Department) Julie Bower (Bidwell Junior High), Daniel Backstrom and Joseph Kittle, whose OPTIONS Program students will be actively involved in every aspect of the project; Frank Cranley, the Superintendent of Schools; Pam Koeberer, President of the Tehama County Education Foundation; Susan Price, Community Development Program Manager for the Community Housing Improvement Program; Barbara McIver, Tehama County Supervisor; Carolyn Ross, Superintendent of Red Bluff Elementary School District; Charles Hayden, Community Development Director for the City of Red Bluff; and Richard A. Bull, Red Bluff City Manager. Their letters are attached.

Cost

Task	Direct Labor Hours	Salaries and Benefits	Service Contract	Materials and Acquisition	Misc. Direct Costs	Overhead and Indirect Costs	Total
1) Exotic Species Eradication	480	3,367		0	2,694	1,061	7,122
2) Install irrigation system	1100	7,717		6,225	5,925	2,431	22,298
3) Planting of trees and shrubs	750	5,261		3,680	3,538	1,658	14,136
4) Planting of native perennial grasses	384	2,694		16,050	1,955	849	21,548
5) Flood debris removal	960	6,734			3,888	2,122	12,744
6) planting of native grasses on stream bank	480	3,367		825	1,944	1,061	7,197
7) monitoring of the project	400	2,806		1,200	1,620	884	6,510
8) Maintenance				650			650
9) Educational Coordination and Outreach	900	6,314		300	3,645	1,989	12,248
Total:							104,453

PROJECT MANAGEMENT TASK

All plans for the project are already developed. Work will be inspected daily by the on-site civil service supervisor as part of his/her responsibility. Reporting requirements and related costs are allocated on a per-hour basis included in the "Overhead and Indirect Cost." This cost runs approximately 5% of the grant request.

QUARTERLY REPORTING SCHEDULE

T a s k	Oct- Dec 99	Jan-Mar 00	Apr- June 00	Jul- Sept 00	Oct- Dec 00	Jan- Mar 01	Apr- Jun 01	Jul- Sept0 1	Oct- Dec 01	Jan- Mar 02	Apr- Jun 02	Jul- Sept 02	Oct- Dec 02	Jan- Mar 03	Apr- Jun 03	Total
1)	7122															7,122
2)		22298														22,298
3)		14136														14,136
4)					21548											21,548
5)			12744													12,744
6)					7197											7,197
7)	783	483	483	783	483	483	483	783	483	483	483	483	783	483	483	6,510
8)					250		100		100		100		100			650
9)	1186	1086	1086	1086	1186	1086	1086	1186	1086	1086	1086	1086	1086	1086	1086	12,248

Schedule

- 1) exotic species eradication (December, 1999);
- 2) installation of the irrigation system (January 2000);
- 3) the planting of the trees and shrubs (February 2000);
- 4) planting of native grasses (December 1999);
- 5) flood debris removal and eradication of invasive exotics (Task 6, May 2000);
- 6) planting of the stream-channel grasses December 2000);

Cost-Sharing

Red Bluff Union High School Students in the OPTIONS program will invest no fewer than 6000 hours of labor over the life of this agreement. Instructors and other school officials will contribute 1000.

Applicant Qualifications

The applicant, The California Conservation Corps (CCC), a state agency, has collaborated with many other agencies and groups on many projects in this area, including the US Forest Service, US Fish and Wildlife Service, the Nature Conservancy, Tehama County Parks and Recreation, and the California Department of Transportation and has more than adequate resources to complete the project in a timely manner. The CCC, Shasta Cascade Operations has four different resource crews within commuting distance of the Project site. Shasta Cascade Operations also administrates Butte Fire Center in Magalia, CA, and the state-wide AmeriCorps Watershed Project, the third-largest AmeriCorps program in the state, with a \$3.1 million annual budget.

The crew supervisor is Mark Hanson, a civil-service employee of the State of California with significant experience applicable to the Project. Overall project coordination will be handled by Russ Irvin. In charge of all operations at Shasta Cascade Operations of the CCC is Erin Healy, Conservation Administrator. Shasta Cascade has several other staff members with extensive experience ready to assist with this project. The Project will not be significantly compromised by any year 2000 problems. The Project itself is not reliant on sophisticated electronic equipment, and potential problems with support operations (such as payroll) are currently being addressed, or have been addressed, by the State of California.

Compliance with Standard Terms and Conditions

There are no sub-contractors on this project. The California Conservation Corps is part of the State of California Resources Agency which complies with all state mandates. An interagency agreement covers all activities with the USFS, but, in this case, no funds are involved.

KATHLEEN A. WHEELER
District Superintendent

JOE PELANCONI
Principal

JANICE BLUNCK
Associate Principal

Red Bluff Union High School

(530) 529-8710
Fax (530) 529-8739
1260 Union Street
P.O. Box 1507
Red Bluff, California 96080

ARMAND BRETT
Associate Principal

BOB BRYSON
Associate Principal

RICK PRESTWOOD
Associate Principal

April 1, 1999

California Conservation Corps
The AmeriCorps Watershed Project
1313 Hartnell Avenue
Redding, California 96002

Attention:
Albert Pierce
Project Assistant

Dear Al,

This correspondence is in regards to the participation of the OPTIONS Program in the proposed, watershed restoration project. It is our intent to participate in the project to the fullest extent. We are currently in the process of moving to a Service-Learning teaching strategy to capture the interest and abilities of the unique students that we serve in our program. The opportunity to work with community groups such as C.C.C. and AmeriCorps is the essence of what we are setting out to accomplish in our transition to Service-Learning.

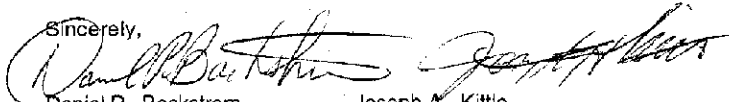
In participating in the project, we are confident that we will be able to fulfill a minimum of 6000 student hours, and a minimum of 1000 staff and teacher hours which will include staff from various programs in the district such as; Salisbury H. S., R.B.H.S. Ag Department, R.B.H.S. Science Department, Technical Support Department, District Maintenance Department, as well as the staff of the OPTIONS Program.

Active participation in this project will benefit the student of the OPTIONS students in a variety of ways, including the following; growth and development in academics, intellect, social and personal issues, as well as, civic responsibility, collaboration, and integrated learning.

It is the belief of the teaching staff here at OPTIONS that participation in this project will catapult our students into the 21st century ahead of many other students through the self empowerment that they will receive as a result of participating in this program.

Thanks for your time, energy, and insight in this powerful endeavor.

Sincerely,



Daniel P. Backstrom Joseph A. Kittle
Teachers of the OPTIONS Program

August 25, 1997

As an instructor in the Agriculture Department at Red Bluff High School, I am committed to the development of multi-purpose trails within the City of Red Bluff. We are currently developing a nature trail through riparian habitat located on land recently purchased by the High School. Furthermore, I will support the efforts of various other community groups by committing at least two hours a month toward the planning and development of a loop trail connecting high school property to property owned by the elementary schools, and to City Parks next to the Sacramento River.

Sincerely,

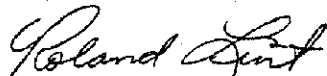


Matt Pritchard
Instructor, Agriculture Department, Red Bluff High School
916-529-8826 ext 8826

August 25, 1997

As an instructor in the Science Department at Red Bluff High School, I am committed to the development of multi-purpose trails within the City of Red Bluff. We are currently developing a nature trail through riparian habitat located on land recently purchased by the High School. Furthermore, I will support the efforts of various other community groups by committing at least two hours a month toward the planning and development of a loop trail connecting high school property to property owned by the elementary schools, and to City Parks next to the Sacramento River.

Sincerely,



Roland Lint
Instructor, Science Department, Red Bluff High School
916-529-8778 ext 8778

**RED BLUFF JOINT UNION HIGH SCHOOL DISTRICT**

P.O. BOX 1507 • 1525 DOUGLASS STREET • RED BLUFF, CALIFORNIA 96080-1507 • (530) 529-8700 • FAX (530) 529-8709

SUPERINTENDENT
Frank CranleyASSISTANT SUPERINTENDENT
Wesley G. Combes

August 1, 1997

Charles E. Hayden
Director, Community Development Department
City of Red Bluff
P.O. Box 400
Red Bluff, California 96080

Dear Chuck,

I was most pleased to discuss with you your plans regarding the installation to a walking path along the Brickyard Creek Canyon. As you know, the canyon captures the beauty of the one of Red Bluff's most picturesque natural resources.

The Red Bluff Union High School District is most enthusiastic about the development of an access path in and through the canyon. We already have plans to expand such a development in the upper reaches of the canyon in the immediate future. Your proposal complements what we believe is a great idea in a more centrally located sphere of influence of the city.

Please advise as to how we may assist as your plans move forward.

Again, it was a pleasure to meet with you. I am looking forward to a long and productive working relationship with you and the other administrators of the City of Red Bluff which beneficially serves the Red Bluff community.

Yours sincerely,

Frank Cranley
Frank Cranley

Vicky P. Dawley

Robert C. Grass

BOARD OF TRUSTEES

Daniel M. King, M.D.

Steven M. Mahoney

David R. Nichols

As Affirmative Action Employer Committed to Equal Treatment and Opportunity for All Employees and Students
(Title VI, Title IX, and Section 504 Vocational Rehabilitation)

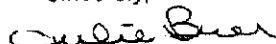
August 8, 1997

To Whom It May Concern,

This letter is written to commit my enthusiastic support (and that of the legions of fifth grade students in my classes who are also committed to this project) for the City of Red Bluff proposal to apply for National Park Service Rivers, Trails and Conservation Assistance. Our proposal hopes to develop a project which connects the open space on Brickyard Creek and the Sacramento River with a trail which will provide joggers, hikers, bird watchers, nature lovers, stroller pushing parents, school bound students, handicapped persons, horseback riders and others with access to Red Bluff's creeks and riparian regions. Coincidentally, this project will also bring long overdue focus and assistance to protecting these regions, stabilizing erosions sites, and cleaning up waterways which are mistaken, by some, as dumping sites. The City of Red Bluff, California State University, Chico and myself (Julie Buer, fifth grade teacher) have been working together to create a planning process using local resources to support this project.

We are fortunate to enjoy an existing relationship with the City of Red Bluff, Department of Forestry, California Department of Water Resources, and the United States Bureau of Reclamation which has resulted in successful projects in the past. We look forward to extending this valued relationship with the funding of the "Red Bluff Trail System" proposal and to the conservation education opportunities it provides for the schools, school children, and residents of Red Bluff.

Sincerely,



Julie Buer, teacher
Bidwell Elementary School
1256 Walnut Street
Red Bluff, Calif. 96080
(916) 527-1417



Community
Housing
Improvement
Program
CHIP

August 11, 1997

To Whom It May Concern:

This letter is written to commit our organization's support for the City of Red Bluff's proposal to apply for National Park Service Rivers, Trails and Conservation Assistance aimed at developing a project which connects the open space on Brickyard Creek and the Sacramento River with a trail which will help to promote economic development, safety, and educational opportunities for the Red Bluff area. The City of Red Bluff, California State University, Chico and the Community Housing Improvement Program (CHIP) have been working together to create a planning process using local resources to support this project.

We are fortunate to enjoy an existing relationship with the City of Red Bluff which has resulted in successful projects in the past. We look forward to extending this valued relationship with the funding of the "Red Bluff Trail System" proposal and the conservation education opportunities it provides for the schools, school children, and residents of Red Bluff.

Sincerely,


Susan Price
Community Development Program Manager

A Private Non-profit Corporation
1001 Willow Street
Chico, CA 95328
(916) 891-6331
FAX: (916) 891-8547

TEHAMA COUNTY EDUCATION FOUNDATION

P.O. Box 525
Red Bluff, CA 96080

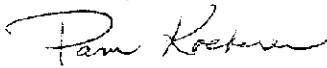
August 7, 1997

It is with a great deal of enthusiasm that I write this letter on behalf of the Tehama County Education Foundation in support of the City of Red Bluff's proposal to apply for National Park Service Rivers, Trails and Conservation Assistance aimed at developing a project which connects the open space on Brickyard Creek and the Sacramento River with a trail which will help to promote economic development, safety and educational opportunities for the Red Bluff area. The City of Red Bluff, California State University, Chico, and the Tehama County Education Foundation have been working together to create a planning process using local resources to support this project.

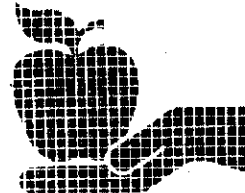
We are fortunate to enjoy an existing relationship with the City of Red Bluff which has resulted in successful projects in the past and we look forward to enhancing this valued relationship with the funding of the *Red Bluff Trail System* proposal. The conservation education it will provide for the schools and school children of Red Bluff is especially important to the philosophy of our organization.

If I can be of further assistance please feel free to contact me at 916-529-1512.

Sincerely,



Pam Koeberer
President, Tehama County Education Foundation



"Business & Education working together for Tehama County"

Board of Supervisors
COUNTY OF TEHAMA

District 1 - Barbara McIver
District 2 - George Russell
District 3 - Charles Willard
District 4 - Ross Turner
District 5 - Bill Borror



Tehama County Courthouse

Richard Robinson
Administrative Assistant
to the Board of Supervisors

March 19, 1998

Joe Andrews
c/o Ms. Julie Buer -- 7-1417
Bidwell School
1256 Walnut St.
Red Bluff, CA 96080

Dear Joe:

Thank you for your recent letter regarding the trail system your school is building. It is a very exciting project and one that you and your class should be very proud of. It is an excellent example of how a group, working together, can make the community a much nicer place. We hope the "outdoor classroom" will provide students with a wealth of knowledge and a fun learning environment for many years to come.

I would be proud to attend your meeting on Thursday, April 9th at 3:45 p.m. in the City Council Chambers and am very pleased that you have invited me. I look forward to meeting you and your committee.

Sincerely,

Barbara McIver
Supervisor, District 1

Meetings 10:00 A.M. Tuesday of Each Week
P.O. Box 250 • 633 Washington St., Red Bluff, CA 96080 • (916) 527-4655 • FAX (916) 529-0980

RED BLUFF ELEMENTARY SCHOOL DISTRICT

1755 Airport Boulevard
Red Bluff, CA 96080

Carolyn S. Ross, Ed.D.
Superintendent

Phone: (530) 527-7200
Fax: (530) 527-9308

February 10, 1999

George Robson, Planning Director
Community Development Department
444 Oak Street
Red Bluff, CA 96080

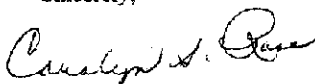
Dear Mr. Robson:

This letter is written to commit my enthusiastic support for the County's proposal to apply for U.S. Forest Service funding aimed at developing a project which connects the open space on Brickyard Creek and the Sacramento River with a trail which will help to promote economic development, safety and educational opportunities for the Red Bluff and Tehama County areas.

The City of Red Bluff, California State University, Chico, Red Bluff Union School District have been working together to create a planning process using local resources to support this project.

We are fortunate to enjoy an existing relationship with the City and County which has resulted in successful projects in the past. We look forward to extending this valued relationship with the funding of the "Recreational Trails Feasibility Study" proposal and to the conservation education opportunities it provides for the schools, school children, and residents of the region.

Sincerely,



Carolyn Ross
Superintendent

DLS/dh

**CITY OF RED BLUFF**

555 Washington Street Post Office Box 400 Red Bluff, California 96080 (916) 527-2805

August 5, 1997

Honorable Mayor and Members of the City Council
Red Bluff, CA**SUBJECT: URBAN CREEK RESTORATION AND TRAIL GRANT
APPLICATIONS**

Councilmembers:

Over the last few months Community Development Department staff have attended meetings with various local property owners, community organizations and local school district employees. The purpose of those meetings was to discuss the apparent need to implement a variety of urban creek projects. These projects would address safety, creek restoration and recreation issues. Examples of potential projects are listed on the attached page.

The main obstacle to proceeding with these projects is lack of funding. One probable source of funding is grants. With the approval of the City Council, City staff will - in cooperation with local property owners, community organizations, local school districts, and with the assistance of CSU Chico - prepare applications for various urban creek restoration and trail projects. Although there is no guarantee grant funds will be awarded it is staff's opinion that the efforts should be made to rank projects and submit grant funding applications.

RECOMMENDATION

That the City Council:

1. Authorize the Community Development Department to proceed with the *preparation* of one or more urban creek restoration and trail construction grant applications.
2. Direct City staff to obtain City Council authorization prior to formally *submitting* any grant applications in the City's name.

Respectfully submitted,


Charles E. Hayden
Community Development Director
Richard A. Bull
City Manager

POTENTIAL URBAN CREEK PROJECTS

- Vegetation removal to increase channel flow capabilities and reduce flood hazards.
- Vegetation planting to increase banks stabilization, and reduce erosion and siltation.
- Trails construction adjacent to Jackson Heights, Bidwell and Red Bluff High Schools to provide walking paths away from vehicle traffic areas for school children.
- Trail construction along the Sacramento River between River Park and Dog Island. This trail, on Bureau of Reclamation Land, could be a "destination" for tourists as well as City residents. If it becomes a destination it may contribute to increased pedestrian traffic and economic vitality in the "downtown" area, especially if connected to the downtown area by stairway(s).
- Subsidence control facilities construction such as gabions, rock and retaining walls to protect structures in danger of being undermined by creek bank subsidence. At least three structures, a garage on Musick Avenue and two dwellings - one on Jackson and one on Pine Street - currently need or will likely soon need some form of bank stabilization facilities to avoid being undermined.
- Flood control Facilities including a floodwater barrier(s) along Reeds Creek to reduce Aloha Street flood hazard.

An example of a local trail is the one beginning near "The Grove" along Sale Lane and extending to the Diversion Dam. This and other trails are indicated on the attached diagram taken from the 1974 Parks System Element of the city's General Plan.

F:\addh\creek\gmt

CALIFORNIA CONSERVATION CORPS

Shasta Cascade Operations

1313 Hartnell Avenue Suite A, Redding, CA 96002

Phone 530.222-0513

Fax 530.222-2432



April 14, 1999

George Robson
Planning Department
County of Tehama
444 Oak Street
Red Bluff, CA 96080

Dear Mr. Robson:

This letter is to inform you that the California Conservation Corps (CCC) has applied for funding for two projects in Tehama County from the CALFED Bay Delta Program.

One project is located at Lake Red Bluff, where the CCC is partnering with the United States Forest Service and the Sacramento River Discovery Center to complete a new, engineered trail in the area. The CCC has applied for CALFED funds to build a 184-foot boardwalk over a sensitive riparian area.

The other project is a riparian area expansion and restoration project at Red Bluff Union High School (RBUHS). The proposed 3.5 acre oak and grass planting will be accomplished through cooperation with the OPTIONS program (Daniel Backstrom) and the RBUHS Maintenance Department (Ron Hein), with whom we have been working. The project forms an integral part of the trail and outdoor classroom planned for the site. Students in the OPTIONS program will be heavily involved in this project. Your support for these two projects would be invaluable.

Sincerely,

A handwritten signature in black ink, appearing to read "Erin Healy".

Erin Healy
Conservation Supervisor

CALIFORNIA CONSERVATION CORPS

Shasta Cascade Operations

1313 Hartnell Avenue Suite A, Redding, CA 96002

Phone 530.222-0513

Fax 530.222-2432



April 14, 1999

Barbara McIver
Tehama County Supervisor
County of Tehama
633 Washington
Red Bluff, CA 96080

Dear Ms. McIver:

This letter is to inform you that the California Conservation Corps (CCC) has applied for funding for two projects in Tehama County from the CALFED Bay Delta Program.

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Sincerely,

A handwritten signature in cursive script that reads "Erin Healy".

Erin Healy
Conservation Administrator

